



Docket: 34108/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	Matthew P. Dugas	
Appln. No.:	10/791,675	
Filing Date:	March 2, 2004	Examiner: Unknown
Title:	Stepped Time Based Servo Pattern and Head	Group Art Unit: Unknown

POWER OF ATTORNEY

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

I hereby certify that this document is being sent via First Class U.S. Mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 19 day of November, 2004.

Sir:

*Frances Prosser*

In the above-referenced patent application, on behalf of **Advanced Research Corporation**, I hereby appoint the Dorsey & Whitney LLP attorneys and agents associated with **Customer Number 25763** to prosecute the patent application identified above and to transact all business in the Patent and Trademark Office connected therewith, including full power of association, substitution, and revocation.

Please address all telephone calls to: Devan V. Padmanabhan at (612) 340-7990.

Please address all correspondence to Devan V. Padmanabhan at the address corresponding to Customer Number **25763**, currently:

DORSEY & WHITNEY LLP  
Intellectual Property Department  
Suite 1500  
50 South Sixth Street  
Minneapolis, Minnesota 55402-1498

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of **Advanced Research Corporation**.

Dated: 11-17-04

Signature:

Name:

Title:

*Matthew P. Dugas*  
Matthew P. Dugas  
CEO



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SUBMISSION UNDER 37 C.F.R. § 3.73(b)

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Sir:

*Frances Cooper*

**Advanced Research Corporation**, a Minnesota corporation, is an owner of the patent application identified above by virtue of either:

1. ☒ An assignment from the inventor(s) of the patent application identified above, a copy of which is attached.

OR

2. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

a. From: To:  
The document was recorded in the U.S. Patent and Trademark Office at Reel , Frame , or a copy of which is attached.

b. From: To:  
The document was recorded in the U.S. Patent and Trademark Office at Reel , Frame , or a copy of which is attached.

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of **Advanced Research Corporation**.

Dated: 11-17-04

Signature: *Matthew P. Dugas*  
Name: Matthew P. Dugas  
Title: CEO

<b>ASSIGNMENT</b> <small>(Entry)</small>	Attorney Docket No.: 34108/US	Page 1 of 2
	First Named Inventor: Matthew P. Dugas	
	Title: Stepped Time Based Servo Pattern and Head	

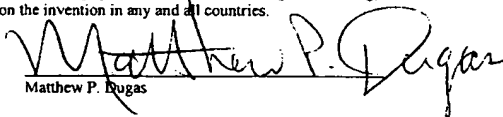
WHEREAS, I, Matthew P. Dugas, residing in St. Paul, MN 55108 and I, Theodore A. Schwarz, residing in Woodbury, MN 55125, have invented certain new and useful improvements as described in an application entitled **Stepped Time Based Servo Pattern and Head** for Letters Patent of the United States, the application being identified in the United States Patent and Trademark Office by Application No. 10/791,675 filed March 2, 2004; and

WHEREAS, Advanced Research Corporation, a corporation organized and existing under the laws of the State of Minnesota, and having offices at 815 14<sup>th</sup> Avenue SE, Minneapolis, MN 55414 ("Assignee"), is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title, and interest in and to the invention, the above-identified patent application, corresponding domestic applications (including divisionals, continuations, and continuations-in-part), corresponding foreign applications, all Letters Patent or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and I authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent or similar legal protection to the Assignee.

I authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

I represent to the Assignee, its successors and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

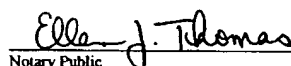
  
 Matthew P. Dugas

#### CERTIFICATE OF ACKNOWLEDGMENT

STATE OF Minnesota

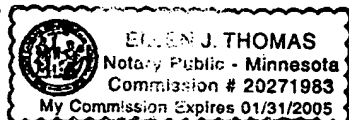
COUNTY OF Ramsey : ss|

Subscribed and sworn to before me, a Notary Public, this 17<sup>th</sup> day of November, 2004.

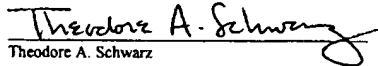
  
 Notary Public

**Comment (COMMENT1):** Note: If Documents are executed in Kentucky, Massachusetts, Pennsylvania or Virginia, then I change "STATE" to "COMMONWEALTH". Also, if executed in the state of Louisiana, change "COUNTY" to "PARISH".

(SEAL)



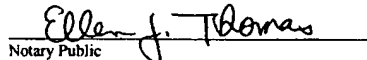
<b>ASSIGNMENT</b> [Entity]	Attorney Docket No.: 34108/US	Page 2 of 2
	First Named Inventor: Matthew P. Dugas	
	Title: Stepped Time Based Servo Pattern and Head	

  
 Theodore A. Schwarz

**CERTIFICATE OF ACKNOWLEDGMENT**

STATE OF Minnesota )  
 ) ss:  
 COUNTY OF Ramsey )

Subscribed and sworn to before me, a Notary Public, this 17<sup>th</sup> day of November, 2004.

  
 Notary Public

Comment [COMMENT2]: Note: If  
 Documents are executed in Kentucky,  
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 or Virginia, then  
 1) change "STATE" to  
 "COMMONWEALTH".  
 Also, if executed in the state of  
 Louisiana, change "COUNTY" to  
 "PARISH".

